



Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

STEPHANIE KOPELOUSOS
SECRETARY

January 12, 2010

Monica Gourdine
Program Operations Engineer
Federal Highway Administration
545 John Knox Road, Suite 200
Tallahassee, Florida 32303

Re: Office of Design, Specifications
Section 782
Proposed Specification: 7820102 Intelligent Transportation Systems – Video Equipment

Dear Ms. Gourdine:

We are submitting, for your approval, two copies of the above referenced Supplemental Specification.

The changes are proposed by Gene Glotzbach to clarify, update, and/or improve content based upon project use. These include correction to table reference and functional requirement that all cameras (IP and analog) provide a composite video output.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via Email to SP965RP or rudy.powell@dot.state.fl.us.

If you have any questions relating to this specification change, please call Rudy Powell, State Specifications Engineer at 414-4280.

Sincerely,

Signature on File

Rudy Powell, Jr., P.E.
State Specifications Engineer

RP/ft
Attachment

cc: Gregory Jones, Chief Civil Litigation
Florida Transportation Builders' Assoc.
State Construction Engineer

INTELLIGENT TRANSPORTATION SYSTEMS–VIDEO EQUIPMENT.**(REV ~~115-120-10~~) (~~FA-6-22-10~~) (~~1-11~~)**

SUBARTICLE 782-1.2.1 (of the Supplemental Specifications) is deleted and the following substituted:

782-1.2.1 Camera: Furnish a CCTV camera that is compatible with the current version of the Department's SunGuide® Software System, and any other camera operating software indicated on the plans or in the contract documents. Use either a dome-type or external positioner-type CCTV camera assembly. Ensure that the appropriate type is used at the location(s) shown on the plans. Use only equipment and components that meet the requirements of these minimum specifications, and are listed on the Department's Approved Product List (APL).

For analog cameras, ensure that the camera produces National Television System Committee (NTSC) composite video output of 1 volt peak-to-peak (Vp-p) at 75 ohms (Ω). In addition, ensure analog and IP cameras provide the following features and capabilities:

1. Day (color)/night (monochrome) switchover and iris control, with user-selectable manual and automatic control capabilities.
2. Minimum resolution of 470 horizontal and 350 vertical TV lines.
3. Ability to produce clear, detailed, and usable video images of the areas, objects, and other subjects visible from a roadside CCTV field site. Ensure that video produced by the camera is true, accurate, distortion free, and free from transfer smear, oversaturation, and any other image defect that negatively impacts image quality under all lighting and weather conditions in both color and monochrome modes.
4. User-selectable automatic gain control (AGC) that is peak-average adjustable to 30 decibels (dB).
5. A minimum signal-to-noise ratio of 50 dB.
6. Automatic color balance that references the white areas of the scene through the lens.
7. An automatic electronic shutter that is user selectable from 1/60 to 1/10,000 of a second.
8. A digital signal processor that provides a minimum 10x digital zoom.
9. Programmable azimuth and compass display with ability to display pan and tilt position with a 1 degree resolution.

Furnish a CCTV camera that provides titling and masking features, including, but not limited to, programmable camera title, programmable preset titles for each preset position, and programmable privacy zones. Ensure that programmable titles are a minimum of 18 characters per line.

SUBARTICLE 782-1.2.9.3 (of the Supplemental Specifications) is deleted and the following substituted:

782-1.2.9.3 Encoded Video Specifications: Ensure that the camera's encoded video supports resolutions that include, but are not limited to, those defined in Table 3.1. Ensure that the camera is capable of delivering color and monochrome video at 30 fps regardless of resolution.

Table 1.1 – Resolution Requirements	
Format	Resolutions
MPEG-2	352 x 240, 352 x 480, 720 x 480
H.264	176 x 120, 352 x 240, 720 x 480
Note: The resolutions attained depend on the data transmission rate.	

INTELLIGENT TRANSPORTATION SYSTEMS–VIDEO EQUIPMENT.

(REV 11-10-10)

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